

REMARKS

This is intended as a full and complete response to the Office Action dated September 30, 2005, having a shortened statutory period for response set to expire on December 30, 2005. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-20 remain pending in the application and are shown above. Claims 1-20 are rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Paragraphs [0021] and [0038] of the specification have been amended to correct typographical errors. Paragraph [0047] has been amended to remove reference numerals not shown in the drawings. Applicants submit that the changes made herein do not introduce new matter.

Claims 1, 7, and 15 are amended to more clearly illustrate the claimed subject matter. Applicants submit that the changes made herein do not introduce new matter.

Claims 1-20 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of *Cheung, et al.* (U.S. Patent No. 6,930,061). Applicants are submitting a terminal disclaimer in a separate paper. Applicants respectfully request withdrawal of the rejection of claims 1-20.

Claims 1-20 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of *Huang, et al.* (U.S. Patent No. 6,806,207). Applicants are submitting a terminal disclaimer in a separate paper. Applicants respectfully request withdrawal of the rejection of claims 1-20.

Claims 1-20 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of *Cheung, et al.* (U.S. Patent No. 6,869,896). Applicants are submitting a terminal disclaimer in a separate paper. Applicants respectfully request withdrawal of the rejection of claims 1-20.

Claims 1-20 stand rejected under 35 U.S.C § 103(a) as being unpatentable over *Foo, et al.* (U.S. Patent No. 5,124,014). The Examiner states that *Foo, et al.* discloses the deposition of a silicon oxide in the presence of RF power at a pressure of less than 50 mtorr using octamethylcyclotetrasiloxane, oxygen and a carrier gas. Applicants note that independent claims 1, 7, and 15 have been amended to clarify that the low

dielectric film produced according to the instant application comprises carbon. Applicants respectfully submit that while *Foo, et al.* describes and claims methods of forming silicon dioxide layers, *Foo, et al.* does not teach or suggest controlling oxygen flow and other process conditions as recited in claims 1, 7, and 15 to deposit low dielectric constant films comprising silicon, oxygen, and carbon.

Therefore, *Foo, et al.* does not teach, show, or suggest a process for depositing a low dielectric constant film, comprising reacting a cyclic organosiloxane with oxygen in the presence of RF power in a chamber at a pressure of between about 2.5 Torr and about 10 Torr, wherein the oxygen is introduced into the chamber at a flowrate less than or equal to the flowrate of the cyclic organosiloxane into the chamber, and wherein the low dielectric constant film comprises silicon, oxygen, and carbon, as recited in claim 1. Applicants respectfully request withdrawal of the rejection of claim 1 and of claims 2-6, which depend thereon.

Regarding claims 7 and 15, Applicants respectfully submit that while *Foo, et al.* describes using an RF substrate bias at 13.56 MHz (column 4, lines 25-26), *Foo, et al.* does not describe or suggest using mixed frequency RF power in a deposition process. Furthermore, as discussed above, *Foo, et al.* does not teach or suggest methods of depositing low dielectric films comprising silicon, oxygen, and carbon.

Therefore, *Foo, et al.* does not teach, show, or suggest a process for depositing a low dielectric constant film, comprising reacting a cyclic organosiloxane with oxygen in the presence of mixed frequency RF power in a chamber at a pressure of between about 2.5 Torr and about 10 Torr, wherein the oxygen is introduced into the chamber at a flowrate less than or equal to the flowrate of the cyclic organosiloxane into the chamber, and wherein the low dielectric constant film comprises silicon, oxygen, and carbon, as recited in claim 7. Applicants respectfully request withdrawal of the rejection of claim 7 and of claims 8-14, which depend thereon.

Foo, et al. does not teach, show, or suggest a process for depositing a low dielectric constant film, comprising reacting octamethylcyclotetrasiloxane with oxygen in the presence of mixed frequency RF power in a chamber at a pressure of between about 2.5 Torr and about 10 Torr, wherein the oxygen is introduced into the chamber at a flowrate less than or equal to the flowrate of the octamethylcyclotetrasiloxane into the

chamber, and the oxygen flowrate is less than or equal to about 200 sccm, and wherein the low dielectric constant film comprises silicon, oxygen, and carbon, as recited in claim 15. Applicants respectfully request withdrawal of the rejection of claim 15 and of claims 16-20, which depend thereon.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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